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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,511	03/09/2004	Lixin Situ	81094149 FMC 1693 PUS	2510
28395	7590	03/03/2006	EXAMINER	
BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			NGUYEN, HUNG T	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/708,511

**Applicant(s)**

SITU ET AL.

**Examiner**

**HUNG T. NGUYEN**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. An Amendment & Declaration filed on Feb. 7, 2006 have been considered and accepted.
2. The Final Rejection was mailed on Dec. 6, 2005 will be removed and the following is a new ground of rejection / Non Final Rejection.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 & 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoda Koji (JP 11-208313) in view of Westberg et al. (U.S. 6,215,298).

Regarding claim 1, Koji discloses a hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (240) of the vehicle [ figs.9-13,16-17, paragraphs 0021-0027 ].

The reference of Koji does not specifically mention a tachometer gauge for displaying engine revolution speed as claim by the applicant because that limitation is obvious and well know in the art.

However, if the applicant believes that that limitation is the primary subject of the invention, then a reference of Westberg teaches a tachometer having two display modes in which different ranges in two different sets of incremental values of engine speed in revolution per minute (rpm) are displayed [ fig.1, col.1, lines 4-8, col.2, lines 53-58 and col.3, lines 49-54 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Westberg in the system of Koji for measuring & displaying the rotations per minute of a rotating shaft.

Regarding claims 2-3, Koji discloses the hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (rpm) is displayed (240) [ figs.9-13,16-17, paragraphs 0021-0027 ] and

Westberg teaches the tachometer gauge & pointer having two display modes in which two different ranges in two different sets of incremental values of engine speed in revolution per minute (rpm) are displayed [ fig.1, col.1, lines 4-8, co1.2, lines 53-58 and co1.3, lines 49-54 ].

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Regarding claim 4, Koji does not mention the indicator is a binary display as claimed by the applicant.

However, Koji discloses the hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (rpm) is displayed (240) [ figs.9-13,16-17, paragraphs 0021-0027 ] and

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Westberg in the system of Koji for performing the same function as desired as the display device (201) showing battery (210a) or fuel (210b) is operating the vehicle and the engine rotation (240) of the vehicle to the driver during operating the vehicle.

Regarding claim 5, Koji discloses the hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (rpm) is displayed (240) [ figs.9-13,16-17, paragraphs 0021-0027 ].

Regarding claim 6, Koji discloses a controller / ECU (100) communicates with display control / ECU (200) to process the signal and control the screen (201) [ fig.8, paragraphs 0018-0021 ] and

Westberg teaches the control circuit to process the tachometer gauge & pointer having two display modes in which two different ranges in two different sets of

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incremental values of engine speed in revolution per minute (rpm) are displayed [ figs.2, 3d, col.10, lines 38-45 and lines 59- 65 ].

Regarding claims 7-11 & 13, Koji discloses the hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (rpm) is displayed (240) when the engine is turned on [ figs.9-13,16-17, paragraphs 0021-0027 ].

Regarding claim 14, Koji discloses a hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (rpm) is displayed (240) [ figs.9-13,16-17, paragraphs 0021-0027 ].

The reference of Koji does not specifically mention a tachometer gauge for displaying engine revolution speed as claim by the applicant because that limitation is obvious and well know in the art.

However, if the applicant believes that that limitation is the primary subject of the invention, then a reference of Westberg teaches a tachometer having two display modes in which different ranges in two different sets of incremental values of engine speed in revolution per minute (rpm) are displayed [ fig.1, col.1, lines 4-8, col.2, lines 53-58 and col.3, lines 49-54 ].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the teaching of Westberg in the system of Koji for determining & displaying the rotations per minute of a rotating shaft.

Regarding claims 15-16, Koji discloses the hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (rpm) is displayed (240) [ figs.9-13,16-17, paragraphs 0021-0027 ].

Westberg teaches the tachometer gauge & pointer having two display modes in which two different ranges in two different sets of incremental values of engine speed in revolution per minute (rpm) are displayed [ fig.1, col.1, lines 4-8, co1.2, lines 53-58 and co1.3, lines 49-54 ].

Regarding claims 17-18, Koji discloses the hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (rpm) is displayed (240) [ figs.9-13,16-17, paragraphs 0021-0027 ].

Regarding claims 19-20, Koji discloses a hybrid vehicle instrument panel display (201) which showing at least three independent indicators as displaying battery (210a), gas (210b) and engine rotation per minute (rpm) is displayed (240) [ figs.9-13,16-17, paragraphs 0021-0027 ].



The reference of Koji does not specifically mention a tachometer gauge for displaying engine revolution speed as claimed by the applicant because that limitation is obvious and well known in the art.

However, if the applicant believes that that limitation is the primary subject of the invention, then a reference of Westberg teaches a tachometer gauge & pointer having two display modes in which two different ranges in two different sets of incremental values of engine speed revolution per minute (rpm) are displayed [ fig.1, col.1, lines 4-8, col.2, lines 53-58 and col.3, lines 49-54 ].

Therefore, it would have been obvious to one having ordinary skill in the art to use the teaching of Westberg in the system of Koji for detecting & displaying the rotations per minute of a rotating shaft.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoda Koji (JP 11-208313) in view of Westberg et al. (U.S. 6,215,298) further in view of Crombez et al. (U.S. 6,480,106).

Regarding claim 12, Both Koji & Westberg do not mention the indicator is an audio sound generator as claimed by the applicant.

Furthermore, Crombez teaches a system to monitor vehicle operation state can use analog needles or LEDs in various configurations as well as adding warning lamps or chimes when the instantaneous rate of consumption gauge with variable rate of consumption limits [ fig.1, col.4, lines 21-27 and abstract ].



Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Westberg and Crombez includes an audio signal in the system of Koji for alerting & showing at least two signals as visual & audible to the driver of the vehicle.

### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (571) 272-2981. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

HUNG NGUYEN  
PRIMARY EXAMINER



Examiner: Hung T. Nguyen

Date: Feb. 28, 2006